

## CLAIMS

What is claimed is:

- 1 1. A method of dynamically identifying a subset of a set of items for which a  
2 plurality of selectors have a similar affinity, each of the items having a combination of  
3 attributes, the method comprising the steps of:
  - 4 (a) presenting for display to each of a group of selectors a subset of a first  
5 group of items, each of the first group of items having a particular  
6 combination of attributes;
  - 7 (b) capturing data indicative of an item preference expressed for a subset of  
8 the presented items by at least some of the group of selectors;
  - 9 (c) selecting a second group of items responsive to the captured data;
  - 10 (d) identifying a subset of the second group of items having similarity among  
11 respective attributes.
- 1 2. The method of claim 1 further comprising the step of iterating steps (a) – (d) until  
2 a stopping condition is met.
- 1 3. The method of claim 1 further comprising the step of identifying a subset of the  
2 group of selectors having similarity among expressed item preferences.
- 3 4. The method of claim 1 wherein step (a) comprises presenting for display every  
4 one of a universe of items.
- 1 5. The method of claim 1 wherein step (b) comprises capturing data indicative of  
2 relative item preference expressed for a subset of the presented items by at least some of  
3 the group of selectors.
- 1 6. The method of claim 1 wherein step (b) comprises capturing data indicative of a  
2 rating assigned to at least some of the presented items by at least some of the group of  
3 selectors.

- 1 7. The method of claim 1 further comprising the step of normalizing the captured  
2 data from each selector.
- 1 8. The method of claim 1 wherein step (c) comprises selecting a second group of  
2 items responsive to the captured data using an evolutionary algorithm.
- 1 9. The methods of claim 1 wherein step (a) comprises presenting for display to a  
2 group of selectors a first group of items, each item having a set of merit attributes and a  
3 set of reproduction attributes.
- 1 10. The method of claim 1 further comprising the step of determining, for each of the  
2 first group of items, a fitness score responsive to the captured data for that item and the  
3 reproduction attributes of that item.
- 1 11. The method of claim 10 further comprising the step of creating a normalized  
2 fitness score vector including the fitness score of a plurality of the first group of items.
- 1 12. The method of claim 10 further comprising the step of selecting one of the first  
2 group of items as reproduction parents using a fitness-proportionate algorithm.
- 1 13. The method of claim 12 wherein the reproduction parents are selected using a  
2 roulette wheel algorithm.
- 1 14. The method of claim 12 wherein the reproduction parents are selected using a  
2 Stochastic Universal Sampling algorithm.
- 1 15. The method of claim 12 further comprising the step of selecting a mate for each  
2 reproduction parent responsive to the reproduction attributes of the mate and the  
3 reproduction parent.

1 16. The method of claim 15 wherein step (c) comprises selecting new items by  
2 applying a recombination operator to the merit attributes of a respective mate-  
3 reproduction parent pair.

1 17. The method of claim 16 wherein the recombination operator is a crossover  
2 operator.

1 18. The method of claim 16 further comprising the step of determining, for each one  
2 of the second group of items, a plurality of reproduction similarity factors, each of the  
3 plurality of reproduction similarity factors representing the similarity between the  
4 reproduction attributes of the one item and each other of the second group of items.

1 19. The method of claim 18 wherein step (d) comprises identifying a subset of the  
2 second group of items, each one of the items having, with respect to each other item of  
3 the subset, a reproduction similarity factor less than a predetermined threshold.

1 20. A method of determining the relative affinity of each of a group of consumers for  
2 a product form, comprising a product or portion thereof, having a combination of  
3 attributes, the method comprising the steps of:

- 4 a) presenting to at least some of a group of consumers a group of product forms,  
5 each of which has a particular combination of attributes,
- 6 b) enabling the at least some of the group of consumers to express a preference for a  
7 subset of the presented product forms,
- 8 c) capturing data indicative of the preferences expressed by the at least some of the  
9 group of consumers,
- 10 d) inputting the data into a computer program for generating a derived group of  
11 product forms including forms having a new attribute or new combination of  
12 attributes, the generation of which is influenced by the captured data,

- 13 e) presenting to the at least some of the group of consumers said derived group of  
14 product forms, and
- 15 f) repeating steps b) through e) to collect data indicative of the relative affinity of the  
16 consumer or group of consumers for a product form.

1 21. The method of claim 20 wherein the captured data is conditioned or the computer  
2 program is conditioned so as to generate a variety of derived product forms which  
3 promotes exploration of consumer preferences for alternative combinations of product  
4 attributes.

1 22. The method of claim 20 wherein the captured data is conditioned or the computer  
2 program is configured so as to generate derived product forms which converge on a set of  
3 product attributes matching the preference of one or a subset of consumers.

1 23. The method of claim 20 wherein the captured data is conditioned or the computer  
2 program is configured so as to generate derived product forms which converge on a  
3 plurality of sets of product attributes matching the preference of a corresponding plurality  
4 of subsets of consumers.

1 24. The method of claim 20 wherein the computer program exploits a genetic or  
2 evolutionary computation technique to generate a derived group of product forms.

1 25. The method of claim 20 wherein the computer program exploits conjoint analysis  
2 weighing of attributes of product forms derived from the expressed preferences of the at  
3 least one of the group of consumers.

1 26. A method of determining which of a large number of forms of a product, each of  
2 which comprises a plurality of alternative attributes, is preferred by a selector, the method  
3 comprising the steps of:

- 4 a) presenting to the selector a set of product forms, each of which has a particular  
5 combination of attributes;

- 6        b) enabling the selector to express a preference for a subset of the presented product  
7 forms;
- 8        c) capturing data indicative of the preferences expressed by the selector;
- 9        d) inputting the data into a computer program for generating a derived set of product  
10 forms including forms having a new attribute or new combination of attributes, the  
11 generation of which is influenced by the captured data;
- 12        e) presenting to the selector at least a portion of said derived group of product forms;  
13 and
- 14        f) repeating steps b) through e) until a stopping criterion is met.

1    27.    The method of claim 26 wherein the selector comprises a single person, a group of  
2 persons, a proxy for a person such as a machine learning system, neural net, statistical  
3 model, or expert system, or a combination thereof.

1    28.    The method of claim 26 comprising the additional step of effecting a sale to the  
2 selector or a subset thereof of a product based on a selected product form.

1    29.    The method of claim 26 wherein a product based on the selected product form is  
2 produced for delivery to the selector or a subset thereof after the stopping criterion is met.

1    30.    The method of claim 26 wherein the product based on the selected product form is  
2 in existence before the stopping criterion is met.

1    31.    The method of claim 26 wherein the selector comprises a plurality of persons, the  
2 method comprising the additional step of presenting to a selector or a subset thereof data  
3 indicative of the preferences of the plurality of persons or a subgroup thereof.

1    32.    The method of claim 26 comprising the additional step of producing a plurality of  
2 units of a selected product form.

1    33.    The method of claim 26 wherein a group of product forms is presented to the  
2 selector via an electronic network.

1 34. The method of claim 26 comprising an additional step, prior to step a, of  
 2 identifying attributes of the product or their range, determining a code to represent the  
 3 attributes or ranges of attributes, or determining the relationship of the code to attribute  
 4 presentation.

1 35. The method of claim 26 wherein the selector is a group of persons and wherein a  
 2 derived group of product forms presented to a person in said group is generated using  
 3 data indicative of the preferences expressed by one or more other persons in said group.

1 36. The method of claim 26 wherein the program generates a said derived group of  
 2 product forms using a genetic algorithm operation, genetic programming, conjoint  
 3 analysis, generative grammars, a generator of random attributes, a genetic computation  
 4 technique, an evolutionary computation technique or a combination thereof.

1 37. The method of claim 26 wherein the program selects from a set of product  
 2 attributes to generate at least a portion of said derived set of product forms.

1 38. The method of claim 26 wherein the program exploits a function which creates or  
 2 modifies an attribute to generate said derived set of product forms or a member thereof.

1 39. The method of claim 26 comprising the additional step, prior to step e), of  
 2 deleting a generated product form from or reintroducing a previously introduced product  
 3 form to a said derived group of product forms.

1 40. The method of claim 26 comprising the additional step of constraining generation  
 2 of a derived group of product forms to those comprising a preselected attribute.

1 41. The method of claim 26 comprising the additional step of permitting a selector or  
 2 a subset thereof to constrain generation of a derived group of product forms to those  
 3 comprising an attribute chosen by a selector.

1 43. The method of claim 26 comprising the step using at least a portion of attribute  
2 preference information or demographic information associated with the selector to  
3 constrain the generation of derived product forms.

1 44. The method of claim 43 wherein the obtained attribute preference information is  
2 the range of prices the buyer is willing to pay for the product, selector body size  
3 information, product style information, color preference, material preference, a  
4 performance specification, or a list of selector desired product functions.

1 45. The method of claim 26 wherein a product attributes is aesthetic.

1 46. The method of claim 26 wherein a product attribute is functional.

1 47. The method of claim 26 wherein a product attributes is sensed by the selector,  
2 visually, aurally, tactilely, orally, or nasally.

1     48.     The method of claim 26 wherein the product is a good, service, menu, or plan.

1     49.     The method of claim 26 comprising the additional step of permitting the selector  
2     to specify that an attribute of said product will be favored in said computer program so as  
3     to enrich said derived product forms with said favored attributes.

1 50. The method of claim 26 wherein the stopping criterion is:

- 2 g) a purchase decision made by the selector or a subset thereof;
- 3 h) the cycling of a predetermined number of iterations of steps b) – e);
- 4 i) the reaching of a consensus agreement on attributes by a plurality of
- 5 persons comprising the selector;

- 6           j)       the reaching of a predetermined number of individual assessments by  
7 persons comprising the selector;
- 8           k)       the passage of a predetermined duration of the method;
- 9           l)       the intervention of a supervisor;
- 10          m)       the arrival of a predetermined point in time;
- 11          n)       the lack of improvement in emerging product forms as judged by a person  
12 comprising the selector;
- 13          o)       the lack of improvement in emerging product forms as judged by a  
14 supervisor;
- 15          p)       the lack of improvement in emerging product forms as judged by a  
16 computer program or subroutine that uses as its input data indicative of the preferences  
17 expressed by the selector;
- 18          q)       the identification of distinct preferences among subsets of the selector for  
19 different attributes or combinations of attributes;
- 20          r)       the selection of a specific product form by a person comprising the  
21 selector; or
- 22          s)       lack of dissimilarity among the emergent product forms; or
- 23          t)       a combination thereof.

1   51.    The method of claim 26 comprising repeating steps b)- e) a sufficient number of  
2 times to permit determination of one or a plurality of product forms preferred by one or a  
3 corresponding plurality of persons.

1   52.    The method of claim 26 comprising the additional steps of collecting data about  
2 the selector or a subset thereof and correlating the product forms preferred by the selector  
3 or a subset thereof to the data.

1   53.    The method of claim 52 wherein the data about the selector or a subset thereof is  
2 data indicative of the selector's state of mind or is demographic data.



1 54. The method of claim 26 wherein the data expressed by the selector or a subset  
 2 thereof is nominal data, indicative of a classification by the selector of the presented  
 3 product forms into predefined categories, ordinal data indicative of a rank ordering of  
 4 preference among presented product forms, a preference for one or a subset of product  
 5 forms, cardinal data comprising a grading given to a product form, utilitarian voting data,  
 6 an alteration of an attribute of a product form made by a selector or a subset thereof, an  
 7 indication of the confidence of the selector, or a subset thereof, in his preference for a  
 8 given product form, or a combination thereof.

1 55. The method of claim 26 wherein, after step c, the data is conditioned by a  
 2 supervisor or the computer program is configured so as to promote convergence to a  
 3 product form desired by a supervisor.

1 56. The method of claim 26 wherein the data is conditioned or the computer program  
 2 is configured so as to lessen the number of cycles required to reach a stopping criterion  
 3 thereby to accelerate the process.

1 57. The method of claim 26 wherein the computer program comprises a plurality of  
 2 programs running in parallel or in series.

1 58. The method of claim 26 comprising the additional step, prior to step d, of  
 2 aggregating data from a plurality of persons comprising the selector to obtain data  
 3 indicative of aggregate ranking.

1 59. The method of claim 26 wherein the selector comprises a person, the process  
 2 comprising the additional step of presenting to the person data indicative of at least a  
 3 portion of the history of his choices or the choices of others engaged as selectors.

1 60. The method of determining a preference of a group comprising the steps of:  
 2 u) presenting electronically one or a series of preference alternatives for  
 3 selection by individual members of a group of persons;

4 v) after members of a first group of persons comprising a multiplicity of said  
5 individual members has electronically responded to a set of offered alternatives, digesting  
6 the selections of said members to determine a preference trend of said first group;  
7 w) presenting electronically a different one or series of multiple choice  
8 preference alternatives altered to accommodate said determined preference trend for  
9 selection by individual members; and  
10 x) after a second group comprising a multiplicity of individual members has  
11 electronically responded to the altered alternatives, digesting the selections of said second  
12 members to determine a refined preference trend.

13  
1 61. Apparatus for determining which of a large number of forms of a product, each of  
2 which has a plurality of alternative attributes, is preferred by a selector comprising one or  
3 more persons, the apparatus comprising:

4 a terminal for presenting to a selector a group of product forms, each of which has  
5 a particular combination of attributes;

6 an input to the terminal enabling the selector to log data indicative of its  
7 preference for a subset of the presented product forms it prefers;

8 a data link from the terminal to a central computer;

9 a program, executable by the computer, for generating plural generations of  
10 derived groups of product forms, the generation of which is influenced by the data  
11 received through the link from the selector; and

12 for presenting through the data link to a selector a said derived group of product  
13 forms;

14 said derived groups of product forms including forms having a new attribute or a  
15 new combination of attributes.

1 62. The apparatus of claim 61 comprising a network wherein the program resides in a  
2 server which is linked through to plural terminals.

1 63. The apparatus of claim 62 wherein the network is an internet, an intranet, or an  
2 extranet.

1 64. The apparatus of claim 61 wherein the terminal comprises a computer, a  
2 television, a telephone, or a personal digital assistant

1 65. The apparatus of claim 61 wherein the selector is a group of persons, the  
2 apparatus comprises a plurality of terminals, and wherein a derived group of product  
3 forms presented to a person in said group is generated using data indicative of the  
4 preferences expressed by one or more other persons in said group.

1 66. The apparatus of claim 61 wherein the program executes a genetic algorithm  
2 operation, a genetic programming operation, a conjoint analysis operation, a generative  
3 grammar operation, a generator of random attributes, or an evolutionary strategy  
4 operation to generate a said derived group of product forms.

1 67. The apparatus of claim 61 wherein the program selects from a set of product  
2 attributes to assemble a said derived set of product forms.

1 68. The apparatus of claim 61 wherein the program exploits a function which can be  
2 varied to modify an attribute to generate a said derived set of product forms.

1 69. The apparatus of claim 61 wherein said input includes means for permitting a  
2 selector to delete a generated product form or to introduce a new product form between a  
3 generation of a said derived group of product forms.

1 70. The apparatus of claim 61 wherein said input or said program includes means for  
2 permitting the imposition of a constraint on the generation of a derived group of product  
3 forms to those comprising a preselected attribute.

1 71. The apparatus of claim 61 wherein said input permits a selector to constrain  
2 generation of a derived group of product forms to those comprising an attribute preferred  
3 by the selector.

1 72. The apparatus of claim 61 wherein said input includes means for obtaining  
2 preference information from the selector and said program uses at least a portion of said  
3 preference information to constrain the generation of derived product forms.

1 73. The apparatus of claim 61 wherein the terminal comprises means for presenting  
2 product attributes to the selector at said terminal visually, aurally, tactilely, or nasally.

1 74. The apparatus of claim 61 wherein the terminal comprises means for permitting  
2 the selector to specify an attribute of said product.

1 75. The apparatus of claim 61 further comprising means for storing a plurality of  
2 product forms preferred by the selector.

1 76. The apparatus of claim 61 further comprising electronic means for effecting a sale  
2 of a product form selected to a selector.

1 77. Software operable on a computer system for determining which of a large number  
2 of forms of a product, each of which has a plurality of alternative attributes, is preferred  
3 by a selector comprising one or more persons, the apparatus comprising:

4 code for presenting on a terminal to a selector a group of product forms, each of  
5 which has a particular combination of attributes;

6 code for enabling the selector to log data on the terminal indicative of its  
7 preference for a subset of the presented product forms;

8 code for transmitting data from the terminal to a central computer;

9 a program, executable by the computer, for generating plural generations of  
10 derived groups of product forms, the generation of which is influenced by the data  
11 received from the selector; and

12 for presenting to a selector at a terminal a said derived group of product forms;  
13 said derived groups of product forms including forms having a new attribute or a  
14 new combination of attributes.

1 78. The method of claim 26 wherein the data indicative of preferences comprises data  
2 indicative of preference as between a presented product form and a pre-existing product, a  
3 product preferred by consumers, or a product popular with consumers.

1 79. The method of claim 26 wherein the data indicative of preferences includes data  
2 indicative of the confidence of a selector in his preference expression.  
3

1 80. The method of claim 79 comprising the additional step of using the data indicative  
2 of the confidence of a selector in the regulation of a strategy of generation of derived  
3 product forms or a pace of convergence to a preferred product form.  
4

1 81. An automated method for identifying member candidates for a group of persons  
2 having a shared affinity, the method comprising the steps of:

3 a) presenting to a group of participants a set of alternatives, each of which  
4 has a particular combination of attributes;

5 b) enabling the participants or a subset thereof to express a preference for a  
6 subset of the presented alternatives;

7 c) capturing data indicative of the preferences expressed by the participants  
8 or a subset thereof;

9 d) inputting the data into a computer program for generating a derived set of  
10 alternatives including alternatives having a new attribute or new combination of  
11 attributes, the generation of which is influenced by the captured data;

12 e) presenting to participants at least a portion of said derived group of  
13 attributes; and

14 f) repeating steps b) through e) until a group of persons having a shared  
15 affinity for an alternative or a set of alternatives is identified.

1 82. The method of claim 26 wherein the set of products generated in step d) also  
2 includes at least one product form specified by a human.

1 83. A method of designing a product having a potentially large number of forms  
2 comprising alternative attributes, the method comprising the steps of:

- 3 a) presenting electronically to each of a plurality of persons a group of  
4 product forms, each of which has a particular combination of attributes;
- 5 b) enabling said persons to express a preference for a subset of the presented  
6 product forms;
- 7 c) capturing data indicative of the preferences expressed by said persons;
- 8 d) inputting the data into a computer program for generating a derived group  
9 of product forms including forms having a new attribute or new combination of  
10 attributes, the generation of which is influenced by the captured data;
- 11 e) presenting to a plurality of persons said derived group of product forms;
- 12 f) repeating steps b) through e) until a stopping criterion is met.

1 84. The method of claim 83 comprising the additional step of producing a plurality of  
2 units of a product based on a selected product form.

1 85. The method of claim 83 comprising the additional step of effecting a sale to one  
2 or more of said persons of a product based on a selected product form.

1 86. The method of claim 83 wherein a derived group of product forms presented to a  
2 person is generated using data indicative of the preferences expressed by one or more  
3 other persons.

1 87. The method of claim 83 wherein the product attributes are sensed by the persons  
2 visually, aurally, tactilely, or nasally.

1 88. The method of claim 83 comprising repeating steps b)- e) a sufficient number of  
2 times to permit determination of one or a plurality of product forms preferred by said  
3 persons.

1 90. The method of claim 83 wherein at least one said person is a professional  
2 designer.

1 91. A method for computerized, automated maximization of affinity between the  
2 preferences of a group of persons and the design of a service, good, or plan, the method  
3 comprising:

4        iterating cycles of generation and evaluation of service, good, or plan alternatives  
5    until a stop criterion is met, wherein

6           the generation and evaluation in each cycle produces an altered set of good,  
7   service, or plan alternatives; and

8        each generation step, save the first, uses as its input an output of the evaluation  
9        step, and

10 each evaluation step uses as its input an output of the generation step.

1     92.     The method of claim 91 wherein the stop criterion is convergence of a given  
2     individual or group of services, goods or plans with the preference of a group of persons.

93. The method of claim 91 wherein the evaluation step of a cycle is done by a plurality of persons, an expert system, or a neural net, thereby to accelerate the time when the stop criterion is met.

1 94. The method of claim 91 wherein the generation step is done by a computer  
2 program for generating good, service, or plan alternatives using a genetic or evolutionary  
3 computational technique.

1     95.     The method of claim 91 wherein the evaluation step of a cycle is conducted by a  
2     neural net trained to simulate a particular person's preference.

1     97.     The method of claim 91 comprising a multiplicity of cycles wherein a person  
2     conducts the evaluations in at least a portion of the cycles the method further comprising  
3     storing data indicative of the alternatives and evaluations in the cycles and using the data  
4     to train a neural net comprising an evaluation engine.

1     98.     An automated method for computer-aided evolutionary design of products  
2     wherein the affinity between a selector and the design object is increased through  
3     repeated cycles of computer program-driven generation of alternative designs and selector  
4     driven evaluation of said alternatives until a stop criterion is reached.

1 99. A method of reaching consensus on a plan comprising a potentially large number  
2 of alternative attributes, the method comprising the steps of:

- 3           a)       presenting electronically to each of a plurality of participating persons a  
4 group of plan alternatives, each of which has a particular combination of attributes;  
5           b)       enabling said persons to express a preference for a subset of the presented  
6 plan alternatives;  
7           c)       capturing data indicative of the preferences expressed by said persons;  
8           d)       inputting the data into a computer program for generating a derived group  
9 of plan alternatives including plans having a new attribute or new combination of  
10 attributes, the generation of which is influenced by the captured data;  
11          e)       presenting to a plurality of participating persons said derived group of plan  
12 alternatives;  
13          f)       repeating steps b) through e) until a consensus is achieved.

1 100. The method of claim 99 comprising presenting on a network comprising an  
2 internet, an intranet, or an extranet.



1 101. The method of claim 99 comprising the additional step of generating plan  
2 alternatives that are preferred by a supervisor and presenting them to the persons so as to  
3 induce the persons to choose attributes of a supervisor-preferred plan.

1 102. The method of claim 99 comprising the additional step of constraining generation  
2 of a derived group of plan alternatives to those comprising a preselected attribute.

1 103. A method for promoting selection of a product from among a large number of  
2 similar product forms comprising alternative attributes, the method comprising the steps  
3 of:

4 a) presenting electronically to a shopper a group of product forms, each of  
5 which has a particular combination of attributes;

6 b) enabling the shopper to express a preference for a subset of the presented  
7 product forms;

8 c) capturing data indicative of the preferences expressed by the shopper;

9 d) inputting the data into a computer program for generating a derived group  
10 of product forms including forms having a new attribute or new combination of attributes,  
11 the generation of which is influenced by the captured data;

12 e) presenting to the shopper said derived group of product forms; and

13 f) repeating steps b) through e) until a stopping criterion is met.

1 104. The method of claim 103 wherein the stopping criterion is selection of a specific  
2 preferred product form for purchase by the shopper.

1 105. The method of claim 103 wherein the shopper selects a specific product form, the  
2 method comprising the additional steps of having said specific product form assembled  
3 after the stopping criterion is met and selling the product to the shopper.

1 106. The method of claim 103 wherein the program selects from preexisting product  
2 forms to generate said derived group of product forms and the shopper selects a said

3 preexisting product form, the method comprising the additional step of selling the said  
4 preexisting product form to the shopper.

1 107. The method of claim 103 wherein the presentation of product forms is made via  
2 an electronic network comprising an internet, an intranet, or an extranet.

1 108. The method of claim 103 wherein the program generates a said derived group of  
2 product forms using a genetic algorithm operation, genetic programming, conjoint  
3 analysis, generative grammars, a generator of random attributes, a genetic computation  
4 technique, an evolutionary computation technique or a combination thereof.

1 109. The method of claim 103 comprising the additional step of permitting said  
2 shopper to constrain generation of a derived group of product forms to those comprising  
3 an attribute preferred by the shopper.

1 110. The method of claim 103 comprising the additional steps of obtaining attribute  
2 preference information from the shopper prior to step b) and using at least a portion of  
3 said attribute preference information to constrain the generation of derived product forms.

1 111. The method of claim 103 comprising the additional step of obtaining attribute  
2 preference information from the shopper, wherein the attribute preference information is  
3 the range of prices the shopper is willing to pay for the product, shopper body size  
4 information, product style information, color preference, material preference, a  
5 performance specification, or a list of shopper-desired product functions.

1 112. The method of claim 103 wherein the computer program for generating a derived  
2 group of product forms is programmed to generate product forms available for sale so as  
3 to shape the selectors preference toward and to promote sale of said available product  
4 forms.

1 113. The method of claim 103 wherein the product is a good or a service.

1 114. The method of claim 111 comprising the additional step of:  
2 presenting electronically different sets of one or a series of preference alternatives  
3 altered to accommodate the refined preference trend; and  
4 after a third group comprising a multiplicity of individual members has  
5 electronically responded to the altered alternatives, digesting the selections of said third  
6 members to determine a more refined preference trend.

1 115. The method of claim 111 wherein the steps of digesting selections to determine a  
2 preference trend is done by a computer program for generating a derived group of  
3 preference alternatives using a genetic or evolutionary computation algorithm.

1 116. The method of claim 111 wherein the alternatives are presented over the internet,  
2 an intranet or an extranet.

1 117. An automated method for identifying member candidates for a group of persons  
2 having a shared affinity, the method comprising the steps of:

- 3 a) presenting to a group of participants a set of alternatives, each of which has a  
4 particular combination of attributes;
- 5 b) enabling the participants or a subset thereof to express a preference for a subset of  
6 the presented alternatives;
- 7 c) capturing data indicative of the preferences expressed by the participants or a  
8 subset thereof;
- 9 d) inputting data into a computer program for generating a derived set of alternatives  
10 including alternatives having a new attribute or new combination of attributes, the  
11 generation of which is influenced by the captured data;
- 12 e) presenting to participants at least a portion of said derived group attributes; and  
13 f) repeating steps b) through e) until a group of persons having a shared affinity for  
14 an alternative or a set of alternatives is identified.